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EXAMINER

POON, KING Y

ART UNIT PAPER NUMBER

2624

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9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/220,063

Applicant(s)  
Stephane Amarger et al.

Examiner  
King Y. Poon

Art Unit  
2624



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 12/23/1998 Preliminary amendment
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4, 5 20) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Specification*

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains claim languages "the device according to the invention," and "means." Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14, and 39 recite the limitation "the device" in claim 14, and the method in claim 39. There is insufficient antecedent basis for this limitation in the claim.

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*Claim Rejections - 35 USC § 103*

3. Claims 1-13, 15, 19-21, 23, 24, 26-38, 40, 44, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (U.S. Patent # 5,287,194) in view of Marbry et al. (U.S. Patent # 5,692,111).

Regarding claims 1, 26: Lobiondo teaches a device (scheduler, column 3, lines 41-45) for determining (column 4, lines 45-50) conditions for processing (criteria, column 3, lines 54-55) to be carried out on data in a file column 3, line 66), by at least one input/output means (printer, column 3, line 31) which modulates a physical quantity, (sets of document, column 4, line 35) comprising: means (the program software (column 3, line 46) that determines printing criteria, column 4, lines 45-50) for determining semantics of the processing of the data, and configuration determination means (the program software (column 3, line 46) that determines printer capabilities (configuration), column 4, lines 1-10 ) adapted, without modifying the data, (print data is not modified when checking capabilities of printers) to take into account the semantics of the processing of the data in order to determine for determining a configuration (printer capabilities (configuration), column 4, lines 1-10) of a input/output means (printer).

Lobiondo does not teach determining a configuration of a pilot of the input/output means designated to implement the processing.

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Marbry et al. teaches that when determining the configuration of a printer for printing a print job, (column 1, lines 65-66, column 2, lines 1-11), the configuration of the printer correspond to a printer driver (pilot) would also need to be determined in order to have the printer drive having the right printer configuration to process print data.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: determining a configuration of a pilot of the input/output means designated to implement the processing.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo by the teaching of Marbry et al. because of the following reasons: (a) it would have allowed the print data processing system of Lobiondo to have the correct printer drive (pilot) for processing the print data; and (b) it would have ensured users of getting a print job printed according to users selected specifications.

Regarding claims 2, 27: Lobiondo teaches wherein: the processing is carried out by at least two input/output means, (column 4, lines column 4, line 64) and the pilot configuration used by the configuration determination means includes selection (selecting of a printer requires the selection of a printer driver, (pilot) see discussion of claim 1) of the input/output means intended to implement the processing.

Regarding claims 3, 28: Lobiondo teaches the device, including: means (the program software (column 3, line 46) that communicates with user, column 5, lines 20-35) of dialoguing with a user adapted to transmit questions (prompt the user, column 5, line 25) to the user and to

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receive information from the user in response, (column 5, line 27) the configuration determination means is also adapted to take into account the information received in response from the user in order to determine the pilot configuration. (selecting of a printer requires the selection of a printer driver, (pilot) see discussion of claim 1, and selecting of a printer depends on the user's response, column 5, lines 25-35).

Regarding claims 4, 29: Lobiondo teaches the device including a memory (database, column 3, lines 65-68) adapted to store information (information relating to print job, column 3, line 67) received in response from the user. (Required completion time entered by user (response) of column 5, lines 25-35 is information relating to print job).

Regarding claims 5, 30: Lobiondo teaches wherein said memory is adapted to also store, associated with each item of information received, an item of information (print job data, column 3, line 58) representing the user who supplied it. (The print data is sent and request to be printed by a user, column 3, lines 55-65. Therefore, the print data send and request to be printed by the user is an item of information representing user who supplied it to be printed)

Regarding claims 6, and 31: Lobiondo teaches wherein the memory is adapted to also store associated with each item of information received, an item of information representing a concerned document. (Column 3, lines 65-68).

Regarding claims 7, and 32: Lobiondo does not teach the device including pilot updating means for: on the one hand to detect that a pilot of the input/output means intended to implement

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the processing is not available or is not up to date in a memory, and on the other hand, to read the pilot in another memory.

Marbry teaches pilot updating means (the program that is performing the function step of fig. 5) for: on the one hand to detect that a pilot of the input/output means intended to implement the processing is not available (unsuccessful in retrieving complete information, column 5, line 50-55) or is not up to date in a memory, and on the other hand, to read (copying, column 3, line 31) the pilot in another memory. (Database, column 5, line 66)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: pilot updating means for: on the one hand to detect that a pilot of the input/output means intended to implement the processing is not available or is not up to date in a memory, and on the other hand, to read the pilot in another memory.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo by the teaching of Marbry because of the following reasons: (a) it would have allowed users using up to date pilot for printing, and (b) it would have allowed users obtaining the complete printer configuration information when the printer configuration is not fully available, as taught by abstract of Marbry, and (c) using up to date pilot would ensure print jobs would be successfully printed.

Regarding claims 8, and 33: Lobiondo teaches the device including: means (the program of the scheduler) for checking an availability of input/output means (column 4, lines 45-50)

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adapted to transmit an item of information representing unavailability for processing of the data, (column 5, lines 20-35) when the means (printer, column 5, line 19) intended to process the data is not available for this purpose; and the determination means (the program of the scheduler, column 3, lines 40-45) is adapted to take into account the unavailability information in order to determine a configuration of another input/output means (column 4, lines 45-50) for implementing the processing of the data.

Regarding claims 9, and 34: Lobiondo teaches a device (scheduler, column 3, lines 40-45) for determining conditions of processing to be carried out on data of a document, (column 4, lines 45-55) by at least one input/output means (printer, column 4, line 48) which uses a physical quantity, (1000 set, column 4, line 35) comprising: quantity determination means (program of scheduler, column 3, lines 40-45) for determining at least two quantities (1000, set column 4, lines 35, and completion time, column 4, lines 56) related to the document; means (program of scheduler, column 3, lines 40-45) for estimating content (1000, set column 4, lines 35, and completion time, column 4, lines 56) of the document, for taking into account each of the at least two quantities, and configuration determination means (program of scheduler, column 3, lines 40-45) for taking into account the content of the document in order to determine a configuration of the input output means (the printer that configured in a way the printer is capable of printing the document, column 4, lines 35-65) intended to implement the processing.



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Lobiondo does not teach the configuration determination means taking into account the content of the document in order to determine a configuration of the pilot of the input output means intended to implement the processing.

Marbry et al. teach that when determining the configuration of a printer for printing a print job, (column 1, lines 65-66, column 2, lines 1-11), the configuration of the printer correspond to a printer driver (pilot) would also need to be determined in order to have the printer drive having the right printer configuration to process print data.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: when the configuration determination means taking into account the content of the document in order to determine a configuration of the input output means intended to implement the processing, the configuration determination means/pilot configuration determination means determines a configuration of the pilot of the input output means intended to implement the processing.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo by the teaching of Marbry et al. because of the following reasons: (a) it would have allowed the print data processing system of Lobiondo to have the correct printer drive (pilot) for processing the print data; and (b) it would have ensured users of getting a print job printed according to users selected specifications.

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Regarding claims 10, and 35: Lobiondo teaches wherein the quantity determination means is adapted to scrutinize data of the document (column 4, lines 49-50) which are directly accessible to a user (column 3, lines 50-65).

Regarding claims 11, and 36: Lobiondo teaches wherein the quantity determination means is adapted to function without using a software application able to make it possible to modify the content of the document. (The scheduler would determine the completion time, column 4, lines 55-63 without modifying the completion time)

Regarding claims 12, and 37: Lobiondo teaches wherein the quantity determination means is adapted to read at least one quantity in a file. (Printer speed, column 4, lines 1-5, column 3, line 68)

Regarding claims 13, and 38: Lobiondo teaches wherein: the processing is carried out by at least two input/output means (column 4, lines 65-66) and the configuration determination means is adapted to select an input/output means designed to implement the process. (Column 4, lines 45-55)

Regarding claims 15 and 40: Lobiondo teaches wherein the quantity determination means is adapted so that one of the quantities represents a number of digital information items (1000 set of document, column 4, line 35) in the document.

Regarding claims 19, and 46: Lobiondo teaches the device including a means of determining parts (set of document column 4, lines 35, and completion time, column 4, lines 56) of the document, wherein: the determination means is adapted to determine at least two

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quantities (document set column 4, lines 35, and completion time, column 4, lines 56) relating to each of the parts, the content estimation means (the program of the scheduler, column 3, lines 40-45) is adapted to estimate (determined, column 4, lines 47-49) content of each of the parts, (set of document column 4, lines 35, and completion time, column 4, lines 56) taking into account each quantity relating to the part, and the configuration determination means is adapted to take into account content of the part in order to determine the configuration of the input output means (printer, column 4, lines 45-50) intended to implement the processing on the part.

Lobiondo does not teach the configuration determination means taking into account the content of the document in order to determine a configuration of the pilot of the input output means intended to implement the processing on the part.

Marbry et al. teaches that when determining the configuration of a printer for printing a print job, (column 1, lines 65-66, column 2, lines 1-11), the configuration of the printer correspond to a printer driver (pilot) would also need to be determined in order to have the printer drive having the right printer configuration to process print data.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: when the configuration determination means taking into account the content of the document in order to determine a configuration of the input output means intended to implement the processing on the part, the configuration determination means/pilot configuration determination means determines a

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configuration of the pilot of the input output means intended to implement the processing on the part.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo by the teaching of Marbry et al. because of the following reasons: (a) it would have allowed the print data processing system of Lobiondo to have the correct printer drive (pilot) for processing the print data; and (b) it would have ensured users of getting a print job printed according to users selected specifications.

Regarding claim 20: Lobiondo teaches a printer characterized in that it has a device.  
(Printer, column 3, lines 25)

Regarding claim 21: Lobiondo teaches a facsimile machine, (the device that is creating a facsimile job, column 3, line 61) characterized in that it has a device.

Regarding claim 23: Lobiondo teaches a display screen, (user interface, column 3, line 32, 40, fig. 2) characterized in that it has a device.

Regarding claim 24: Lobiondo teaches a photographic apparatus, (the device that is creating the copy job, column 3, line 61) characterized in that it has a device.

Regarding claim 44: Lobiondo teaches a step of printing the document. (Column 3, lines 45-50).

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4. Claims 14, 39, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (U.S. Patent # 5,287,194) in view of Marbry et al. (U.S. Patent # 5,692,111). as applied to claims 46 above, and further in view of Barry et al. (U.S. Patent 5,859,711).

Regarding claims 14, 39, and 47: Lobiondo does not teach wherein the quantity determination means is adapted so that one of the quantities represents a number of pages in the document represented by the document are determined.

Barry et al., in the same area of printing document, teach quantity determination means (program of fig. 5) is adapted so that one of the quantities represents a number of pages (232, fig. 5, column 8, lines 30-45) in the document represented by the document are determined.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo in view of Marbry et al. to include: the quantity determination means is adapted so that one of the quantities represents a number of pages in the document represented by the document are determined.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo in view of Marbry et al. by the teaching of Barry et al. because of the following reasons: (a) it would have allowed the system of Lobiondo to route different pages of a document to different printers as taught by Barry et al. at column 10, lines 1-5; and (b) it would have allowed the document to be printed faster by allowing different printer to print different pages of the document.

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5. Claims 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (U.S. Patent # 5,287,194) in view of Marbry et al. (U.S. Patent # 5,692,111). as applied to claim 1 above, and further in view of Shimizu (U.S. Patent # 5,040,079).

Regarding claim 22: Lobiondo does not teach a modulator demodulator, characterised in that it has a device.

Shimizu, in the same area of printing device, teaches a modulator demodulator, (column 7, line 35-40) characterised in that it has a device used with a printing system. (Column 7, line 30)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo in view of Marbry et al. to include: a modulator demodulator, characterised in that it is a device used in the printing system of Lobiondo in view of Marbry et al.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo in view of Marbry et al. by the teaching of Shimizu because of the following reasons: (a) it would have allowed the printing system to communicate with other devices by modulating and demodulating signals.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (U.S. Patent # 5,287,194) in view of Marbry et al. (U.S. Patent # 5,692,111). as applied to claim 1 above, and further in view of Takahashi (U.S. Patent # 5,926,285).

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Regarding claim 22: Lobiondo does not teach a camera having an image sensor, characterised in that it includes a device.

Shimizu, in the same area of printing device, teaches a camera (20, fig. 1) having an image sensor, characterised in that it includes a device used with a printing system. (91, fig. 1)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo in view of Marbry et al. to include: a camera having an image sensor, characterised in that is a device used in the printing system of Lobiondo in view of Marbry et al.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo in view of Marbry et al. by the teaching of Takahashi because of the following reasons: (a) it would have allowed the printing system to print a print job created by a camera.

7. Claims 17, 42, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (U.S. Patent # 5,287,194) in view of Marbry et al. (U.S. Patent # 5,692,111). as applied to claims 9, and 34 above, and further in view of Lopresti (U.S. Patent # 6,298,173)

Regarding claims 17, 42 and 45: Lobiondo in view of Marbry et al. do not teach wherein the quantity determination means is adapted so that one of the quantities represents a degree of compression to be obtained on the document using predetermined compression software.

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Lopresti in the same area of transmitting document data, teaches one of the quantities in document information represents a degree of compression to be obtained on the document using predetermined compression software. (Column 9, lines 15-35).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo in view of Marbry et al. to include: wherein the quantity determination means is adapted so that one of the quantities represents a degree of compression to be obtained on the document using predetermined compression software.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo in view of Marbry et al. by the teaching of Lopresti because of the following reasons: (a) it would have allowed the printing system to print data with a high compression rate to save memory in storing the document data; (b) it would have allowed the printing system to print good images with a low compression rate.

8. Claims 16, 18, 41, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lobiondo (U.S. Patent # 5,287,194) in view of Marbry et al. (U.S. Patent # 5,692,111). as applied to claims 9, and 34 above, and further in view of Yoshida et al. (U.S. Patent # 6,184,999)

Regarding claims 16, 18, 41, and 43: Lobiondo in view of Marbry et al. do not teach, wherein the quantity determination means is adapted so that one of the quantities represents a



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period of time necessary for compression of the document, by predetermined compression software.

Yoshida, in the same area of storing image data, teaches one of the quantities represents a period of time necessary for compression of the document, by predetermined compression software. (Fig. 6, column 6, lines 20-25)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo in view of Marbry et al. to include: wherein the quantity determination means is adapted so that one of the quantities represents a period of time necessary for compression of the document, by predetermined compression software.

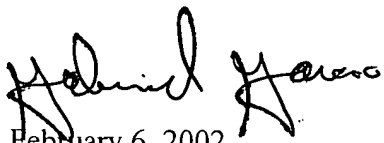
It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Lobiondo in view of Marbry et al. by the teaching of Lopresti because of the following reasons: (a) it would have avoided the compression process overtake the image data available for compression to ensure smooth flowing of image data in the compression software without having to wait for image data.

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*Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892 or to Supervisor Mr. David Moore whose phone number is (703) 308-7452.

**GABRIEL GARCIA  
PRIMARY EXAMINER**

  
February 6, 2002